Coding and Capturing of Data

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Contents

- Organise, and code data.
- Capture the data – SPSS, Ms Excel, STATISTICA.
- "Clean" (screen) the data. Determine types of data measurements.
- Calculate descriptive statistics.
- Investigate the data, by investigating the results of descriptive statistics. Choice of statistical techniques is the responsibility of the researcher.

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Data coding

- Number each questionnaire
- Give numerical "codes" to responses to each question
  Example
- Only capture the codes
  Example

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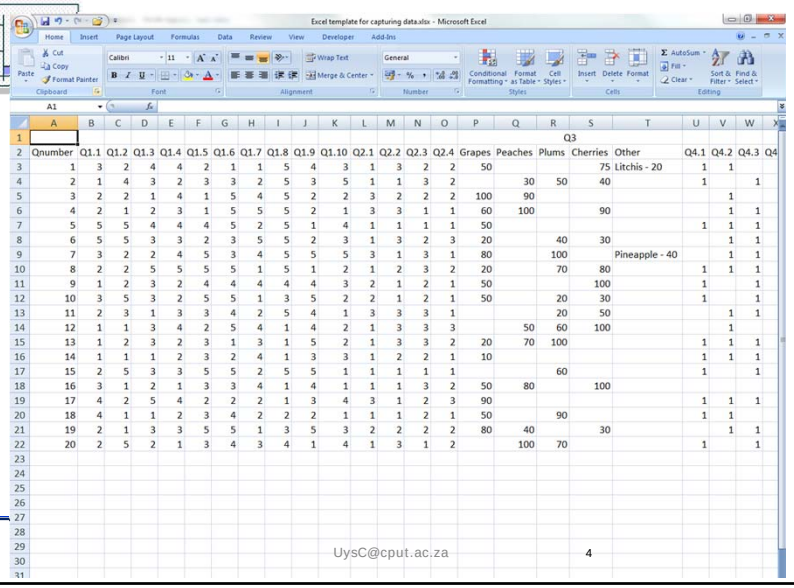

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1																	Q3							
2	Qnumber	Q1.1	Q1.2	Q1.3	Q1.4	Q1.5	Q1.6	Q1.7	Q1.8	Q1.9	Q1.10	Q2.1	Q2.2	Q2.3	Q2.4	Grapes	Peaches	Plums	Cherries	Other	Q4.1	Q4.2	Q4.3	Q4
3	1	3	2	4	4	2	1	1	5	4	3	1	3	2	2	50			75	Litchis - 20	1	1		
4	2	1	4	3	2	3	3	2	5	3	5	1	1	3	2		30	50	40		1		1	
5	3	2	2	1	4	1	5	4	5	2	2	3	2	2	2	100	90					1		
6	4	2	1	2	3	1	5	5	5	2	1	3	3	1	1	60	100		90			1	1	
7	5	5	5	4	4	4	5	2	5	1	4	1	1	1	1	50					1	1	1	
8	6	5	5	3	3	2	3	5	5	2	3	1	3	2	3	20		40	30			1	1	
9	7	3	2	2	4	5	3	4	5	5	5	3	1	3	1	80		100		Pineapple - 40		1	1	
10	8	2	2	5	5	5	5	1	5	1	2	1	2	3	2	20		70	80		1	1	1	
11	9	1	2	3	2	4	4	4	4	4	3	2	1	2	1	50			100		1		1	
12	10	3	5	3	2	5	5	1	3	5	2	2	1	2	1	50		20	30		1		1	
13	11	2	3	1	3	3	4	2	5	4	1	3	3	3	1			20	50			1	1	
14	12	1	1	3	4	2	5	4	1	4	2	1	3	3	3		50	60	100			1		
15	13	1	2	3	2	3	1	3	1	5	2	1	3	3	2	20	70	100			1	1	1	
16	14	1	1	1	2	3	2	4	1	3	3	1	2	2	1	10					1	1	1	
17	15	2	5	3	3	5	5	2	5	5	1	1	1	1	1			60			1		1	
18	16	3	1	2	1	3	3	4	1	4	1	1	1	3	2	50	80		100					
19	17	4	2	5	4	2	2	2	1	3	4	3	1	2	3	90					1	1	1	
20	18	4	1	1	2	3	4	2	2	2	1	1	1	2	1	50		90			1	1		
21	19	2	1	3	3	5	5	1	3	5	3	2	2	2	2	80	40		30			1	1	
22	20	2	5	2	1	3	4	3	4	1	4	1	3	1	2		100	70			1		1	

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Cleaning Data

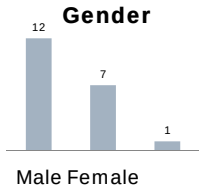
Gender	
	Frequency
Male	12
Female	7
3	1
	20

Using Ms Excel for Statistical Analysis

- Descriptive Statistics

Gender	
	Frequency
Male	12
Female	7
3	1
	20

- Charts



Age	
Mean	36.35
Standard Error	2.215
Median	33
Mode	28
Standard Deviation	9.906
Sample Variance	98.134
Kurtosis	-1.221
Skewness	0.252
Range	33
Minimum	21
Maximum	54
Sum	727
Count	20

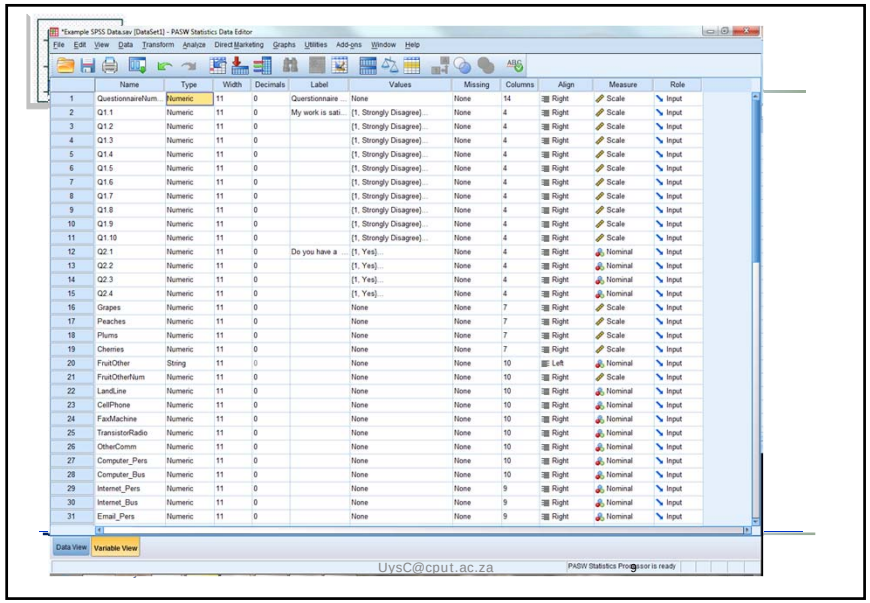
Get the Right Tool for the Job!

Friends Don't Let Friends Use Excel for Statistics!

http://www.cs.uiowa.edu/~jcryer/JSMTalk2001.pdf

Data capturing in SPSS

- Menu
- Data view
- Variable view
  - Variable name
  - Variable type
  - Variable length
  - Labels
  - Category values
  - Missing values
- Data types


*Example SPSS Data.sav [DataSet1] - PASW Statistics Data Editor
File Edit View Data Transform Analyze Direct Marketing Graphs Utilities Add-ons Window Help
Name Type Width Decimals Label Values Missing Columns Align Measure Role
1 QuestionnaireNum... Numeric 11 0 Questionnaire ... None None 14 Right Scale Input
2 Q1.1 Numeric 11 0 My work is sati... {1, Strongly Disagree}... None 4 Right Scale Input
3 Q1.2 Numeric 11 0 {1, Strongly Disagree}... None 4 Right Scale Input
4 Q1.3 Numeric 11 0 {1, Strongly Disagree}... None 4 Right Scale Input
5 Q1.4 Numeric 11 0 {1, Strongly Disagree}... None 4 Right Scale Input
6 Q1.5 Numeric 11 0 {1, Strongly Disagree}... None 4 Right Scale Input
7 Q1.6 Numeric 11 0 {1, Strongly Disagree}... None 4 Right Scale Input
8 Q1.7 Numeric 11 0 {1, Strongly Disagree}... None 4 Right Scale Input
9 Q1.8 Numeric 11 0 {1, Strongly Disagree}... None 4 Right Scale Input
10 Q1.9 Numeric 11 0 {1, Strongly Disagree}... None 4 Right Scale Input
11 Q1.10 Numeric 11 0 {1, Strongly Disagree}... None 4 Right Scale Input
12 Q2.1 Numeric 11 0 Do you have a ... {1, Yes}... None 4 Right Nominal Input
13 Q2.2 Numeric 11 0 {1, Yes}... None 4 Right Nominal Input
14 Q2.3 Numeric 11 0 {1, Yes}... None 4 Right Nominal Input
15 Q2.4 Numeric 11 0 {1, Yes}... None 4 Right Nominal Input
16 Grapes Numeric 11 0 None None 7 Right Scale Input
17 Peaches Numeric 11 0 None None 7 Right Scale Input
18 Plums Numeric 11 0 None None 7 Right Scale Input
19 Cherries Numeric 11 0 None None 7 Right Scale Input
20 FruitOther String 11 0 None None 10 Left Nominal Input
21 FruitOtherNum Numeric 11 0 None None 10 Right Scale Input
22 LandLine Numeric 11 0 None None 10 Right Nominal Input
23 CellPhone Numeric 11 0 None None 10 Right Nominal Input
24 FaxMachine Numeric 11 0 None None 10 Right Nominal Input
25 TransistorRadio Numeric 11 0 None None 10 Right Nominal Input
26 OtherComm Numeric 11 0 None None 10 Right Nominal Input
27 Computer_Pers Numeric 11 0 None None 10 Right Nominal Input
28 Computer_Bus Numeric 11 0 None None 10 Right Nominal Input
29 Internet_Pers Numeric 11 0 None None 9 Right Nominal Input
30 Internet_Bus Numeric 11 0 None None 9 Right Nominal Input
31 Email_Pers Numeric 11 0 None None 9 Right Nominal Input
Data View Variable View
PASW Statistics Processor is ready
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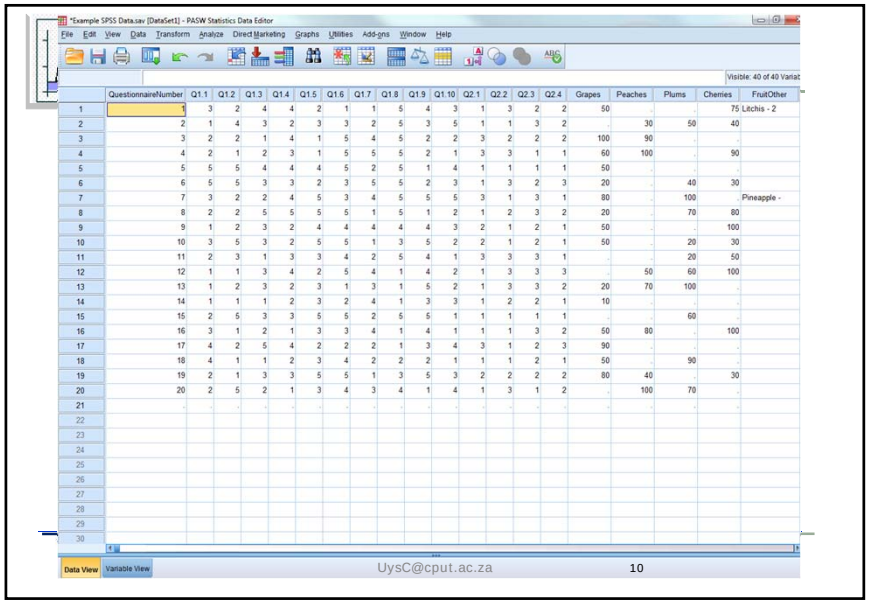
*Example SPSS Data.sav [DataSet1] - PASW Statistics Data Editor
File Edit View Data Transform Analyze Direct Marketing Graphs Utilities Add-ons Window Help
Visible: 40 of 40 Variables
QuestionnaireNumber Q1.1 Q1.2 Q1.3 Q1.4 Q1.5 Q1.6 Q1.7 Q1.8 Q1.9 Q1.10 Q2.1 Q2.2 Q2.3 Q2.4 Grapes Peaches Plums Cherries FruitOther
1 1 3 2 4 4 2 1 1 5 4 3 1 3 2 2 50 . . 75 Litchis - 2
2 2 1 4 3 2 3 3 2 5 3 5 1 1 3 2 . 30 50 40
3 3 2 2 1 4 1 5 4 5 2 2 3 2 2 2 100 90 . .
4 4 2 1 2 3 1 5 5 5 2 1 3 3 1 1 60 100 . 90
5 5 5 5 4 4 4 5 2 5 1 4 1 1 1 1 50 . . .
6 6 5 5 3 3 2 3 5 5 2 3 1 3 2 3 20 . 40 30
7 7 3 2 2 4 5 3 4 5 5 5 3 1 3 1 80 . 100 . Pineapple -
8 8 2 2 5 5 5 5 1 5 1 2 1 2 3 2 20 . 70 80
9 9 1 2 3 2 4 4 4 4 4 3 2 1 2 1 50 . . 100
10 10 3 5 3 2 5 5 1 3 5 2 2 1 2 1 50 . 20 30
11 11 2 3 1 3 3 4 2 5 4 1 3 3 3 1 . . 20 50
12 12 1 1 3 4 2 5 4 1 4 2 1 3 3 3 . 50 60 100
13 13 1 2 3 2 3 1 3 1 5 2 1 3 3 2 20 70 100 .
14 14 1 1 1 2 3 2 4 1 3 3 1 2 2 1 10 . . .
15 15 2 5 3 3 5 5 2 5 5 1 1 1 1 1 . . 60 .
16 16 3 1 2 1 3 3 4 1 4 1 1 1 3 2 50 80 . 100
17 17 4 2 5 4 2 2 2 1 3 4 3 1 2 3 90 . . .
18 18 4 1 1 2 3 4 2 2 2 1 1 1 2 1 50 . 90 .
19 19 2 1 3 3 5 5 1 3 5 3 2 2 2 2 80 40 . 30
20 20 2 5 2 1 3 4 3 4 1 4 1 3 1 2 . 100 70 .
Data View Variable View
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